

CLAIMS:

1. A method of calibrating components in a transceiver that comprises a transmitter chain and a receiver chain which include a pre-determined number of frequency stages and means for frequency transposition between said frequency stages, the method comprising:

5 successively establishing a sequence of signal connections between the frequency stages in the transmitter chain and the corresponding frequency stages in the receiver chain, so as to obtain a sequence of signal paths from one baseband stage in the transmitter chain to a baseband stage in the receiver chain, where each signal path differs from the preceding signal paths by including one or more specific components that shall be calibrated and that are not included in any one of the preceding signal paths;

10 transmitting pre-determined test signals over each of said signal paths;

15 receiving response signals corresponding to the transmitted test signals;

20 establishing whether or not the performance or performances of the specific components for each signal path is/are acceptable in relation to the test signals and the response signals; and

25 adjusting the specific component or specific components so as to obtain an acceptable performance when it is established that said performance is unacceptable.

20 2. A method according to Claim 1, wherein a digital interface is connected to the baseband stage of the transceiver, and wherein the method is commenced by mapping the signal influence of the digital interface.

25 3. A method according to Claim 1, wherein the transceiver includes at least one filter which constitutes the specific component in one of said signal paths.

30 4. A method according to Claim 3, wherein the test signal used in the calibration of the filter is a multi-frequency signal that has a pre-determined frequency range.

5. A method according to Claim 4, wherein the multi-frequency signal is a frequency sweep.

6. A method according to Claim 4, wherein the multi-frequency signal includes
5 solely one I-component or solely one Q-component.

7. A method according to Claim 1, wherein the transceiver includes at least one first pair of sideband suppressing mixers which constitute the specific components in one of the signal paths, wherein the method includes setting at least one of the mixers so that the associated response signal will show undesired sidebands and wherein adjustment of said first pair of sideband suppressing mixers includes adjustment of said mixers so as to suppress undesired sidebands to a predetermined extent.
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8. A method according to Claim 7, wherein the test signal used in the calibration of said first pair of sideband suppressing mixers is a single frequency signal.
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9. A method according to Claim 1, wherein the transceiver includes at least one amplifier which constitutes the specific components in one of said signal paths, wherein the test signal used in the calibration of said amplifier includes at least two frequency components, wherein intermodulation products of the frequency components are identified on the basis of the corresponding response signal, and wherein adjustment of the amplifier includes adjustment of the linearity of the amplifier, so that the identified intermodulation products will lie below pre-determined limit values.
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10. A method according to Claim 9, wherein the linearity of the amplifier is adjusted by controlling the supply of current to the amplifier.
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11. A method according to Claim 9, wherein the linearity of the amplifier is adjusted by controlling an input impedance of the amplifier.
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12. A transceiver circuit comprising:

a transmitter chain and a receiver chain that include a pre-determined number of frequency stages and means for frequency transposition between the frequency stages and;

means for establishing successively a sequence of signal connections between the frequency stages in the transmitter chain and the corresponding frequency stages in the receiver chain, such as to obtain a sequence of signal paths from a baseband stage in the transmitter chain to a baseband stage in the receiver chain, wherein each signal path differs from the preceding paths by virtue of including one or more specific components that are not included in any one of the preceding signal paths.

10. 13. A transceiver circuit according to Claim 12, which further comprises

means for transmitting pre-determined test signals over each of said signal paths;

means for receiving response signals corresponding to the transmitted test signals;

means for establishing whether or not the performance of the component or components specific to each signal path is acceptable or not on the basis of the test signals and the response signals; and

means for adjusting the specific component or components so as to obtain acceptable performance when it is established that component performance is not acceptable.

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